

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Addiese: COMMISSIONER FOR PATENTS P O Box 1450 Alexandra, Virginia 22313-1450 www.wepto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/536,467	05/25/2005	Sergei Braun	29948	4946
7550 0221/2008 Martin Moynihan Anthony Castorina 2001 Jefferson Davis Highway Suite 207			EXAMINER MESH, GENNADIY	
			Arlington, VA	22202
			MAIL DATE	DELIVERY MODE

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

# Application No. Applicant(s) BRAUN, SERGEI 10/536,467 Office Action Summary Examiner Art Unit GENNADIY MESH 1796

T Period for R	he MAILING DATE of this communication appears on the cover sheet with the correspondence address eply
WHICHE - Extension after SIX - If NO peri - Failure to Any reply	TENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, VER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  of time may be variable under the provisions of 37 CFR 1:39(a). In no event, however, may a reply be timely filed of the communication.  (3) MCNIT'S from the mailing date of this communication.  The provision of the provision of the communication of the provision of the
Status	
1)⊠ Re	sponsive to communication(s) filed on 25 May 2005.
2a) ☐ Th	is action is FINAL. 2b) This action is non-final.
3)□ Sir	nce this application is in condition for allowance except for formal matters, prosecution as to the merits is
clo	sed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.
Disposition	of Claims
4)⊠ Cla	aim(s) <u>114- 152</u> is/are pending in the application.
4a)	Of the above claim(s) is/are withdrawn from consideration.
5)□ Cla	aim(s) is/are allowed.
	aim(s) <u>132-144</u> is/are rejected.
	sim(s) is/are objected to.
8)∏ Cla	aim(s) are subject to restriction and/or election requirement.
Application	Papers
9)⊠ The	specification is objected to by the Examiner.
10) <u></u> The	e drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.
App	olicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Re	placement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)□ The	e oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.
Priority und	er 35 U.S.C. § 119
	nowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  No b) Some * c) None of:
1.[	Certified copies of the priority documents have been received.
2.[	Certified copies of the priority documents have been received in Application No
3.[	Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See	the attached detailed Office action for a list of the certified copies not received.
Attachment(s)	References Cited (PTO.892)  4) Interview Summery (PTO.413)

- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
  3) Historical Disclosure Statement(s) (PTO/SE/CS) Paper No(s)/Mail Date 12/20/2005.
- Paper No(s)/Mail Date.\_\_\_\_\_.

  5) Notice of Informal Patent Application.
- 6) Other: \_

Application/Control Number: 10/536,467

Art Unit: 1796

#### DETAILED ACTION

# Election/Restrictions

Applicant's election without traverse of Claims 132 – 144 in the reply filed on November 13, 2007 is acknowledged.

Claims 113 -131 and 145 – 152 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected inventions, there being no allowable generic or linking claim. Claims 1 – 112 are canceled by Applicant.

# Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claims 132-144 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for general method of treatment of protein contain substances in order to obtain promoters and following step of polycondensation of those promoters, does not reasonably provide enablement for polymers with structures claimed by Applicant in Claims 132-144. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope of claims 132-144.

Case law holds that applicant's specification must be "commensurately enabling [regarding the scope of the claims]." See Ex Parte Kung, 17 USPQ2d 1545, 1547 (Bd. Pat. Appl. Inter. 1989). Otherwise undue experimentation would be involved in Application/Control Number: 10/536,467

Art Unit: 1796

determining how to practice and use applicant's invention. The test for undue experimentation as to whether or not all compounds within the scope of claims 132-144 can be used as claimed and whether claims 132-144 are meet the test is stated in *Ex parte Forman*, 230 USPQ 546, 547 (Bd. Pat. Appl. Inter. 1986) and *In re Wands*, 8 USPQ2d 1400 (Fed. Cir. 1988). Upon applying this test to claims 132-144, it is believed that undue experimentation **would** be required because:

- (a) The quantity of experimentation necessary is great since claims 132 -144 read on very wide variety of compounds containing natural modified or not modified amino acids.
- (b) There is no direction or guidance presented for making specific polymers with specific polymer structures as claimed in Claims 1342-144.
- (c) There is an absence of working examples concerning making and isolating specific polymers with structures as it claimed in Claims 132-144.

In light of the above factors, it is seen that undue experimentation would be necessary to make and use the invention of claims 132-144.

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be neadived by the manner in which the invention was made. Application/Control Number: 10/536,467

Art Unit: 1796

Claims 132 – 144 are rejected under 35 U.S.C. 102(b) as being unpatentable over Goodman et al. (US Re. 30,170) in view of Gouesnard "Reactivite du nitrite de sodium. V. Action sur les amino-acides, peptides et proteines" BULLETIN DE LA SOCIETE CHIMIQUE DE FRANCE 1989 N° 1 – cited by Applicant.

Goodman discloses hydrolysable copolymers of natural amino acids and hydroxyacids obtain by incorporation of alpha ( or beta or gamma) hydroxyacids residue in peptide backbone ( see abstract and column 1, lines 12-18), wherein amino acid and hydroxyacid linked by ester bond ( see Goodman , general formula on bottom of column 1 and in the top of column 2) — same as it require by A-B bond of radicals A and B in Claims 132 -144. According to Goodman ( see column4,lines 15-25) presence of ester bond "to endow it ( polymers) with the desirable hydrolysable properties".

Radical A as Y-CO-CHRa –O reads on hydroxyacids residue when Ra is hydrogen and Y is OH group and residue of natural amino acid (in general formula provided by Goodman) reads on radical B - note, that peptide backbone comprising all natural occurring amino acids claimed as radical B by Applicant.

Goodman is silent regarding use of specific radicals A ( different from Y-CO-CHR<sub>a</sub> –O ) as a residue of **hydroxy amino acids** (see for example structure in Claim 135).

However, Gouesnard teach that hydroxyl amino acids can be obtain by treating proteins with sodium nitrite ( see Scheme 1, page 89).

Application/Control Number: 10/536,467 Page 5

Art Unit: 1796

Therefore, it would be obvious to one or ordinary skill in the art to use hydroxy amino acids obtained per teaching of Gouesnard in stead of hydroxyacids in order to prepare hydrolysable polyesters as it disclosed by Goodman with reasonable expectation of success, until unexpected results to the contrary can be shown by Applicant.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GENNADIY MESH whose telephone number is (571)272-2901. The examiner can normally be reached on 10 a.m - 6 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272 1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Art Unit: 1796

Gennadiy Mesh Examiner Art Unit 1796

GM

/VASUDEVAN S. JAGANNATHAN/ Supervisory Patent Examiner, Art Unit 1796